

DRAFT

To **REPLACE** Existing SIP

# **Utah State Implementation Plan**

## **Section VIII**

### **Prevention of Significant Deterioration**

Adopted by the Utah Air Quality Board  
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# Utah State Implementation Plan

## Section VIII

### Prevention of Significant Deterioration

#### A. INTRODUCTION

In 1977, Congress added language to the Clean Air Act to prevent significant deterioration of air quality in areas where the air quality was still pristine. The Act placed a special emphasis on protection of the nation's national parks and wilderness areas where pristine air is one of the important attributes for visitors to the area. Areas are designated according to the degree of protection that is needed, and a baseline pollution level is established. The Act then allows the air quality to degrade only a specified amount from this baseline level.

##### 1. Utah's PSD Program.

The State of Utah developed rules and revised the State Implementation Plan to implement the Prevention of Significant Deterioration (PSD) program as required by the 1977 Clean Air Act (CAA). EPA approved Utah's PSD program on February 12, 1982. PSD applies to all areas of the State except those designated as nonattainment under Section 107 of the CAA. PSD permitting requirements apply to all air pollutants regulated under the CAA. Deterioration of air quality must only be tracked for PM<sub>10</sub>, NO<sub>2</sub> and SO<sub>2</sub>. If an area is designated nonattainment for an air pollutant, PSD may still apply for all other pollutants.

##### 2. Nitrogen Dioxide Increments.

On October 17, 1988, EPA promulgated PSD increments for nitrogen dioxide. Utah incorporated the new increments into the PSD program. These increments apply to all areas within the state designated as attainment or unclassifiable for nitrogen dioxide under Section 107 of the federal CAA.

##### 3. PM<sub>10</sub> Increments.

On November 3, 1995 EPA approved a revision to Utah's PSD program to replace the total suspended particulate (TSP) increment with a PM<sub>10</sub> increment.

##### 4. WEPCO Revisions.

On August 19, 2004 EPA approved changes to Utah's PSD program to reflect changes in the federal regulations (commonly referred to as the WEPCO rule). The changes affected how applicability is determined for electric utility generating units.

##### 5. NSR Reform.

On December 31, 2002 the Environmental Protection Agency finalized significant changes to the federal PSD new source review regulations (this major rulemaking effort is commonly referred to as NSR reform). These regulations were the subject of numerous challenges, and in 2005 the DC Circuit Court

1 vacated portions of the NSR reform regulations. In addition, revisions to the NSR Reform regulations to  
2 clarify the routine maintenance, repair and replacement (RMRR) provisions were promulgated in 2003,  
3 but then stayed by the DC Circuit Court of Appeals on December 23, 2003, pending appeal. Utah's PSD  
4 permitting rule, R307-405, was modified in February 2006 to incorporate the 2002 NSR reform  
5 provisions. The RMRR provisions and the portions of the PSD regulation that were vacated by the DC  
6 Circuit Court were not included in this incorporation pending resolution of the challenges to the  
7 regulation.  
8

## 9 **B. AREA DESIGNATIONS**

10  
11 All attainment and unclassifiable areas in the state must be designated as Class I, Class II or Class III.  
12 These designations are intended to establish the amount of air quality degradation that is acceptable for  
13 these areas. Nonattainment areas are not covered under the PSD requirements, but in most cases an area  
14 will only be nonattainment for a few pollutants. In this case, the PSD requirements will still apply for all  
15 other pollutants. R307-405-4 classifies all areas in Utah. These areas are identified below.  
16

### 17 **1. Class I Areas**

18 As required by the Clean Air Act, the five national parks that were in existence in Utah in 1977 are  
19 mandatory Class I areas.  
20

21 Arches National Park  
22 Bryce Canyon National Park  
23 Canyonlands National Park  
24 Capitol Reef National Park  
25 Zion National Park  
26

27 Class I areas are given the greatest degree of protection under the Clean Air Act. In addition, these areas  
28 are the focus for visibility concerns, as outlined in Section XVII of this State Implementation Plan.  
29

### 30 **2. Class II Areas**

31 All other areas in the state are currently classified as Class II areas. Industrial growth is allowed in these  
32 areas, but in many parts of the state where the air is exceptionally clean, the air quality will not be  
33 allowed to degrade to the level of the National Ambient Air Quality Standards.  
34

### 35 **3. Class III Areas**

36 The remaining designation of Class III could be used for more industrial areas. Greater growth is allowed  
37 in these areas, although in all cases the National Ambient Air Quality Standards must still be met. There  
38 are currently no areas in Utah that have been designated Class III.  
39

## 40 **C. AREA REDESIGNATIONS**

41  
42 The State of Utah may change the classification of areas within the state. However, there are some  
43 limitations in the Clean Air Act that must be considered when reclassifying areas.  
44

## **1. Restrictions on Redesignation.**

a. In accordance with Section 162(a) of the federal Clean Air Act, mandatory Class I areas may not be redesignated. There are five mandatory Class I areas in Utah: Arches National Park, Bryce Canyon National Park, Canyonlands National Park, Capitol Reef National Park, and Zion National Park.

b. In accordance with Section 164(a) of the federal Clean Air Act, the following areas may be redesignated only as Class I or II.

(1) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreation area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(2) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

c. Lands within the exterior boundaries of reservations of federally recognized Indian Tribes may be redesignated only by the appropriate Indian body as provided in Section 164 of the Clean Air Act.

## **2. Analysis of Proposal.**

Before proposing a change in classification, Section 164 of the federal Clean Air Act requires the State to prepare information about the proposal. The executive secretary will prepare a discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic and social and energy effects of the proposed redesignation. Any person who petitions the Board for redesignation of an area is required to prepare and submit this analysis to the Board in accordance with R307-405-5.

Before proposing to redesignate an area to Class III, the following additional information is required:

a. documentation that the redesignation will not cause, or contribute to, concentrations of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

b. the permit application for any major source or major modification (as defined in R307-405) that could receive a PSD permit only if the area in question were redesignated as Class III, and any material submitted as part of that application, insofar as practicable.

## **3. Consultation with Local Governments**

Before the Board proposes the redesignation of any area, the executive secretary will consult with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

#### **4. Public Comment**

The Board will provide an opportunity for public comment on the proposed reclassification and supporting documentation.

a. Notice will be published in newspapers of general circulation in the affected area and written notice will be made to local government units, other states, Indian governing bodies and Federal Land Managers whose lands may be affected by the proposed redesignation. Such notice will be made at least 30 days prior to the public hearing and include a statement of the availability of the information described in Section C.3 above.

b. At least one public hearing will be conducted in the affected areas in accordance with the procedures established in 40 CFR 51.102.

c. Prior to the issuance of notice respecting the redesignation of any Federal lands, written notice will be provided to the appropriate Federal Land Manager who will be afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In recommending redesignation of any area with respect to which a Federal Land Manager has submitted comments, the Board will publish a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for recommending such redesignation against the recommendation of the Federal Land Manager).

#### **5. Additional Requirements for Redesignating Areas to Class III**

If the Board is proposing to redesignate an area of the state to Class III, section 164 of the Clean Air Act requires additional consultation and approval. The State of Utah will ensure that the following actions have occurred before redesignating any area to Class III.

a. The proposed redesignation has been specifically approved by the Governor after consultation with appropriate committees of the Legislature, if it is in session, or with the leadership of the Legislature, if it is not in session.

b. Units of local government representing a majority of the residents of the proposed area to be redesignated have enacted ordinances concurring in the redesignation.

#### **6. Submittal**

The State of Utah will submit the redesignation to the EPA Administrator as a revision to the State Implementation Plan.

### **D. PERMITTING REQUIREMENTS FOR NEW AND MODIFIED SOURCES**

R307-405 establishes the permitting requirements for new major sources or major modifications in attainment or unclassified areas of the state as required by 40 CFR 51.166.

## **1. Impact Analysis**

An applicant for a PSD permit is required to conduct an air quality analysis of the ambient impacts associated with the construction and operation of the proposed new source or modification. The main purpose of the air quality analysis is to demonstrate that new emissions emitted from a proposed major stationary source or major modification, in conjunction with other applicable emissions from existing sources (including secondary emissions from growth associated with the new project), will not cause or contribute to a violation of any national ambient air quality standard or PSD increment. Ambient air monitoring may be required before and after construction of the source to ensure that the modeled results are accurate.

## **2. Best Available Control Technology**

Utah's PSD program requires all new major sources and major modifications in PSD areas to use the best available control technology that would yield the highest air cleaning efficiencies and the lowest pollution discharges. Over time, it is expected that older sources will upgrade their operations to become more efficient and competitive in the marketplace and under the PSD program these sources are also required to upgrade their pollution controls as part of the modification. The program has been successful in Utah, and the number of sources considered "grandfathered" and operating under pre-1977 emission limitations continues to decrease.

## **3. Additional Impact Analysis**

The air quality impact assessment of PSD sources goes beyond measuring the impact of new sources on the NAAQS and PSD increment. The permit applicant must prepare additional impact analyses to assess the impacts of air, ground, and water pollution on soils, vegetation and visibility caused by the new source and any associated growth. Class I areas require additional scrutiny to ensure that the air quality related values that are important to each protected area are not adversely affected by the new source.

## **4. Minor Source Permitting Program**

In addition to the PSD permitting program, Utah also requires new minor sources and minor modifications to all sources to apply best available control technology. R307-410 establishes modeling requirements to ensure that minor sources and modifications will not cause or contribute to a violation of the NAAQS.

## **E. Increment Violations**

Where the Board determines that an increment established under R307-405-6 is violated, the Board will promulgate a plan and implement rules to eliminate the violation

## **F. Emission Inventories for Increment Tracking.**

An initial emissions inventory tracking system for increment consumption has been developed for existing major sources approved since the minor source baseline dates were established. The tracking system will be maintained for all pollutants having increments.